

NON-BINDING ARBITRATION INITIATED 10/21/08
PURSUANT TO
DECREE OF MAY 19, 2003, 538 U.S. 720
KANSAS V. NEBRASKA & COLORADO
NO. 126, ORIG, U.S. SUPREME COURT

DEPOSITION OF SCOTT ROSS,
produced, sworn, and examined on Monday, the 23rd day
of February, 2009, between the hours of 8:00 o'clock
in the forenoon and 6:00 o'clock in the afternoon of
that day at Husch Blackwell Sanders LLP, 4801 Main
Street, in the City of Kansas City, County of
Jackson, State of Missouri, before:

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Registered Professional Reporter
of
JAY E. SUDDRETH & ASSOCIATES, INC.
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Overland Park, Kansas 66212-5755

a Certified Court Reporter within and for the State
of Missouri.

Taken on behalf of the State of Nebraska.

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INDEX

SCOTT ROSS	PAGE
Direct Examination by Mr. Wilmoth	4
Cross-Examination by Mr. Draper	42
Redirect Examination by Mr. Wilmoth	43
Signature:	44
Certificate:	45

EXHIBITS

EXHIBIT NUMBER	DESCRIPTION	PAGE REFERENCED
16	Letter to Dick Wolfe dated 4-2-08	7
17	Letter to Kenneth Nelson dated 5-9-06	13
18	Above Lovewell Operations 2006 watering season	15
19	Fax dated 8-21-06 and Daily Water Report Summary Main Canal Above Lovewell	16

SCOTT ROSS,
of lawful age, having been first duly sworn to tell
the truth, the whole truth, and nothing but the
truth, testified as follows:

DIRECT EXAMINATION

BY MR. WILMOTH:

Q. Mr. Ross, how are you today?

A. I'm fine, thank you.

Q. You've been present at all the
depositions today. Correct?

A. I have.

Q. So you know that my name is Tom Wilmoth
and I'm an attorney for the state of Nebraska?

A. Yes, I do.

Q. Great. And could you please just state
for the record your current occupation?

A. I'm the water commissioner for Northwest
Kansas, for the Kansas Department of Agriculture,
Division of Water Resources.

Q. And what area does that cover, northwest
Kansas?

A. About the northwest one-third of Kansas.

Q. So what is your responsibility relative
to the area in question here, Kansas-Bostwick
Irrigation District and below?

A. Well, Kansas-Bostwick Irrigation District encompassed all in my field office, and then that field office extends all the way to the west, including the upper sub-basins as well.

Q. And your field office is the Stockton Field Office. Is that correct?

A. That's correct.

Q. And since you've been present here, you may have heard a couple of folks earlier today indicate that you had some knowledge of the KBID system?

A. Yes.

Q. All right. So among the folks that are present today, are you probably the most familiar with that system?

A. Probably.

Q. I'd like to spend a little time just talking about that system, in general.

A. Okay.

Q. Could you give me a 30,000-foot overview of that system and how it operates physically?

A. Okay. Divert water from the Republican River at Guide Rock, whether that be a release from Harlan County Reservoir or natural flows. Those flows then travel approximately 15 miles through

Nebraska until they reach the state line. There's a gauge at the Kansas State line on the Courtland Canal. Water then is either put into Lovewell Reservoir, much of the time in the off season, or delivered to the District itself, and there is an upper division that's gets water directly from the Courtland Canal and the lower division is typically getting water from the Lovewell Reservoir. That encompasses, I think they have authorized about 43,000 acres.

Q. Authorized to receive reclamation water?

A. Yes.

Q. And that is surface water?

A. Yes.

Q. And do you know how many acres within KBID receive groundwater?

A. Not specifically. Not that I can give you a specific number. I know that there are -- KBID has a -- KBID has a large boundary. The certified acres that are within that boundary are the 43,000 I was talking about.

Q. I'm sorry, I beg your pardon.

A. Within those -- within that boundary system you will have groundwater irrigation and some individual surface water irrigation that occurs on

lands that aren't necessarily in the District. They're within the boundaries, but they're not certified to be irrigated by the District.

Q. Okay. And you don't know how many acres within the certified area receive groundwater?

A. I know on an annual basis that number is probably on the order of about a thousand, 1,500. Maybe a little more in the time when you have water shortages, but I wouldn't think probably more than 2,000 at any one year.

Q. So is it your understanding that when there is a water shortage, these groundwater -- these acres which are authorized to receive groundwater do receive groundwater?

A. Yes.

Q. In what amounts?

A. Typically those are going to be on the order of -- most of those water rights are going to average about 1 acre foot per acre.

Q. Okay. And that's -- is that an annual pumping volume --

A. Yes.

Q. -- essentially? Okay. I'm going to hand you what we'll mark as Exhibit 16.

(Whereupon, Ross Deposition Exhibit

Number 16 was marked for
identification by the reporter.)

MR. WILMOTH: For the record, that
little bracket is mine. Apparently a copy was
made with my bracket. It's not part of the
original document, John, nor is it relevant for
purposes of my next question.

Q. (By Mr. Wilmoth) Could you please
examine this document and identify it for the
record?

A. Yes. This is a response to Dick Wolfe,
Colorado State Engineer, dated April 2nd, 2008. It's
in response to some questions that he had asked of
Kansas Division of Water Resources.

Q. And I direct your attention to question
and answer No. 3 on the second page of that
document.

A. Yes.

Q. Could you read the question first and
then the answer?

A. Yes. "The number of acres within the KBID
-- that may be irrigated by use of supplemental
groundwater," and Kansas answer, "Groundwater from
wells is authorized to be voted on 13,912 acres
within KBID."

Q. Do you know what that refers to?

A. No. That -- I can speculate that it's the -- somewhere near the number of total acres that would be receiving ground and surface water within those boundaries.

MR. WILMOTH: I'm sorry, could you repeat that?

(The requested portion of the record was read by the reporter.)

Q. (By Mr. Wilmoth) I'm not sure I understood your answer.

A. Okay.

Q. Are you saying that 13,912 acres within the KBID boundary could receive both surface and groundwater?

A. Go back to my previous answer, when you have a large area within the boundaries of Kansas-Bostwick Irrigation District, within those boundaries there are 43,000-some odd acres certified by the Bureau of Reclamation to receive water from the District. Also within that boundary, but not overlapping with the irrigation district lands, this 13,000 number is something on the order of about what I would anticipate are authorized by private rights, both ground and surface water rights. This is individual

pumpers from a stream to be irrigated within that -- within that boundary. So if you ask the question like it was asked, that might be the number you get.

Q. Okay. So basically, I understand you correctly, within KBID, the number of acres certified that could also receive groundwater is something on the order of 1,500 to 2,000?

A. Well, I can't tell you how many actually certified that would receive. I can tell you annually that number is going to be about -- that actually receive additional water, on the order of about 1,500.

Q. Okay. So the balance, 10,500 or so, 11, whatever that number is, those are lands that are not certified to receive surface water from the reclamation project. Is that what you're suggesting?

A. They might be certified, but they wouldn't normally receive water. I can't give you an answer --

Q. Okay.

A. -- to the exact number.

Q. Okay. Fair enough. And who makes the decision as to who gets water and how much within the KBID system?

A. Board of directors.

Q. And they decide annually?

A. Yes.

Q. And do they decide who receives water between the above Lovewell users and the below Lovewell users?

A. Yes.

Q. How is that decision made?

A. Typically it's made because of the various water supplies. Historically we have always tried to make the two equal, so that if you have certain amount that you can receive from Lovewell and those downstream users would -- you know, could anticipate 8 inches, then they would try and make sure that they balanced that with 8 inches delivery up to the upper. During this drought period from, you know, 2002 to 2007 there became limited opportunities for the upper to receive water, so they would do their best to maximize the amount that was delivered to the lower and then supplement the upper as best they could.

Q. With groundwater?

A. No. With diversions from river or any other diversions from -- it's all surface water in KBID. There's no groundwater diverted under the KBID authority.

Q. Okay. So those folks in -- the above Lovewell users in recent years have been allocated less water than the below level users?

A. Yes, on occasion. Yes.

Q. And what's the basis for that decision?

A. The supply that's available to the lower users is a function of the storage in Lovewell and Lovewell operations. The water supply that's available for the upper division is purely dependent on either storage in Harlan County or diversions directly from the river.

Q. Natural flow diversions, is that what you're referring to?

A. Yes.

Q. So in 2005, for example, did the above Lovewell users take any water from Harlan County storage?

A. I don't think so.

Q. Did they take any natural flow water?

A. I don't recall exactly. There may have been some minimal amount of natural flow water.

Q. Are there any water transfers that go on within KBID, from one user to the other?

A. They have some limited ability to move water around. I think it's within landowner-tenant. I

don't think you could market water between owners,
but I know there is a certain amount of transfer that
takes place.

Q. I'll give you what's Exhibit 17.

(Whereupon, Ross Deposition Exhibit
Number 17 was marked for
identification by the reporter.)

Q. (By Mr. Wilmoth) I'll ask you to take a
look at this and see if you have ever seen a
document like this. No?

A. No, I have not.

Q. Could you identify the document for the
record?

A. Sure. It's a letter from the U.S.
Department of Interior, Bureau of Reclamation from
Area Manager Alice Johns to Kenneth Nelson,
Superintendent, Kansas-Bostwick Irrigation District,
and it's authorizing a water right transfer. It's
requesting a transfer from Thompson, Inc., and Robert
E. Watson, and break down the charges for water
rights transfer.

Q. And do you have any idea how common
these transfers are?

A. I do not.

Q. Do you have any idea why these kind of

transfers might be made?

A. Typically they're going to be to, if you have a limited water supply, say the projection by the board is 4 inches per acre, that's of minimal use to an individual on a particular tract of land, but if he can take the 4 inches from this tract of land and apply it another tract of land and end up with 8 inches, then that makes the project more feasible for him.

Q. And so typically the seller of that interest, I assume, would receive some compensation from the buyer of that interest?

A. I'm assuming you're right. I don't know.

Q. Okay. So the seller of that interest would not be able to use water in the District. Correct?

A. That's correct.

Q. But the buyer of that interest under your hypothetical would have 8 inches of water with which to irrigate?

A. That's my understanding, yes.

Q. And you don't know typically what the -- these rights transfer for in terms of dollar amounts?

A. I don't have any idea.

Q. Okay. How regularly do you communicate with Kenny Nelson?

A. Oh, probably on average once a month.

Q. Do you -- I'm sorry, strike that.

Did you have occasion to communicate with Mr. Nelson in 2006 about Republican River water supplies?

A. Probably.

Q. Were you in your current position at that time?

A. Yes.

Q. I'll hand you what will be Exhibit No. 18.

(Whereupon, Ross Deposition Exhibit Number 18 was marked for identification by the reporter.)

Q. (By Mr. Wilmoth) Again, the brackets are my marks. They're there solely to direct your attention to the relevant portions. What do these passages indicate to you about the production in KBID in 2006?

A. It's indicating that -- this is a typical kind of diary or log type entry that Ken might make. The first one was combined with one really good rain and some additional source. Looks as though we have

helped our irrigators to be in a good position for a good harvest this fall. Typically that's sort of Kenny's way of communicating that the water they made releases served some good purpose.

Q. Okay. And within KBID, in your experience, are the KBID irrigators fairly vocal about the absence of water when it occurs?

A. They can be, yes.

Q. Very good. So would you expect that in July of 2006, when this letter or log was created, that if there were water supply problems they would be reflected in this?

A. At this juncture, at the end of July, the water supply would have been pretty well fixed. And in that time frame, so I don't -- the hollering would have been over with by this time. It would have occurred in June probably.

Q. I'll give you Exhibit No. 19.

(Whereupon, Ross Deposition Exhibit Number 19 was marked for identification by the reporter.)

Q. (By Mr. Wilmoth) Again, for the record, the brackets are mine, not the original document. Just simply to call your attention. If the hollering was over in July of '06, I would assume

that it would be over in August of '06. And what is your assessment of the conclusion in the brackets in this document?

A. He's talking about some flows in the river. When he's -- and this document is talking about with the shot of water we received pre-Harlan County and this one we are now receiving post-Harlan County, we are producing a lot of additional bushels. He's talking about some natural flow coming down the river, both before they made the release and now this one afterwards, and they're making some deliveries with this. And I think I encourage you to exercise a little caution in terms of producing additional bushels. When you're at this stage of shortage any water helps, and so that a lot of bushels might be a few bushels per acre, but that's a lot of bushels.

Q. How was the yield in 2005 and 2006 in KBID?

A. I don't know. It isn't something I studied.

Q. In your experience does the source of the water really affect yields if water -- is water from Harlan County storage any better than water from natural flow?

A. No.

Q. Water from groundwater is no better or

worse than water from Harlan County?

A. Not really.

Q. Do you have any opinion on how the wells within KBID affect return flows from KBID to the system below KBID?

A. Probably only a very minimum. There's not a substantial aquifer within the irrigation district that's largely limited to some meet formation. They have fairly low transmissivity. The KBID district's also underlaid by a quite a number of tile drains that return that loss or field loss or canal loss back to the river, and so probably those wells only have -- I mean, obviously there isn't a whole lot of acreage, but even those that are outside probably don't have a lot of opportunity to intercept return flows.

Q. Were you present earlier when Mr. Book explained that he was relying, or I don't want to mischaracterize this, was employing an approximately 76 percent efficiency for lands above Lovewell?

A. Yes.

Q. How does that number relate to your personal experience?

A. I didn't do any specific calculations. I

know KBID in general has a higher efficiency than most of the other districts that I deal with, just simply because they're a little bit more aggressive with varied laterals, lined canals, that sort of thing. They are going to be a higher efficiency. I can't attest to whether or not 76 is the right number.

Q. What about this area below KBID? I think you may have been present when Mr. Pope explained that there were five or six hundred have wells in the alluvium below KBID. Do you agree with that?

A. Yes.

Q. Do you have any opinion on the impact of those wells on return flows to the system?

A. Yes. In terms of the return flows within the District, they're going to have no impact. Their alluvial wells in the District is above the alluvium, by and large. Once those return flows get to the river, that's a fairly high transmissivity alluvial situation, and so certainly those wells divert water that ultimately has to be replaced by the river, so yes, there is some impact there.

Q. This is below KBID?

A. Yes. And the river alluvium.

Q. How are most of the wells within and outside of KBID in this area of the basin metered?

A. The entire alluvial system was metered in 2000 -- 2001 or '02 we completed metering of all the alluvial wells. Probably 70 percent of the ones in the District, those groundwater diversions are actually metered. They're in the process of being metered.

Q. Are those totalizing meters?

A. Yes.

Q. And are you involved in the kind of day to day data gathering from that -- of that metered information?

A. Most of that metered information is going to go through our water use report system and most of that is done in Topeka. We just house the end result.

Q. Okay. You house the end result for the lands in your field office?

A. Right.

Q. Boundaries?

A. Yes.

Q. Okay. Are there any other districts, small, smallish districts that are below KBID or are those all individual users?

A. Irrigation districts?

Q. Yes.

A. No. KBID is the furthest downstream district on the Republican system. Everyone else is individual pumpers with individual pumps in the river.

Q. Okay. And the vast majority of those are irrigation uses, as Mr. Pope said?

A. Yes.

Q. Okay. Do you have any view on how the efficiencies of those users relate to the efficiencies within KBID?

A. Because a great deal of the efficiency losses in KBID are as a result of system design and application coming from the canals, the laterals to the extent that they have pivot systems and the pivot systems are going to be on the order of probably 90 percent efficient in either case, either is inside or outside the District, the vast majority of the diversions below in the alluvial either pump in surface water or groundwater converting to pivot, if they're not already. And those efficiencies, because of the limited resource, probably continue to grow. They're seeking more ways to do more with less. So those system efficiencies are probably 90 percent.

Q. Are there any substitute supplies available in the District, that you're aware of, in KBID?

A. Other than?

Q. Other than groundwater.

A. Oh, yes.

Q. Such as?

A. There are some surface water -- individual surface water diversions. Frequently they are on small tributaries that are often supplied by the waste coming from the District, so if you're talking about in terms of a drought or water shortage supply, they're typically very short as well.

Q. So am I understanding you correctly to say that some users within the District actually rely on the tail water within the District?

A. Yes.

Q. And they supply that to some beneficial use such as irrigation?

A. Yes.

Q. Okay. How does that affect return flow to the river?

A. Well, obviously it will diminish the return flow to the river, to the extent it's used.

Q. Any idea how much?

A. Not right off the top of my head.

Q. Was this occurring, do you think, in '05 and '06?

A. Given the shortage of supply there's probably some of it, because some of those folks have small off stream storage type things, but I would -- I doubt that it was very pervasive across the basin.

Q. Had there been more water available, though, it would have been something that you might expect?

A. Sure. Yes.

Q. Are these surface water rights that are senior to the MDS?

A. Typically they're going to be senior to MDS, yes.

Q. These are rights that are granted by the state of Kansas?

A. Yes.

Q. And the source of those rights under the -- under the water right certificate, if you will, is a tail water source or from tributary?

A. No, it will be tributary surface water, yes.

Q. And to the extent flow in the tributary exists, the right may be exercised?

A. Yes.

Q. Any other alternative supplies?

A. None that I can think of right offhand.

Q. In water short years, in your experience within KBID, is it typical that flood irrigation is abandoned before pivot irrigation?

A. Probably.

Q. As a rule, that's -- folks usually rely on the pivots and let the flood go?

A. Yeah.

Q. Why is that?

A. Well, probably two-fold. One is there's the efficiency involved in terms of being able to, you know, adequately irrigate more acres with the pivot system, less system losses, that sort of thing. And then I suspect probably if I have invested in a pivot, I would want to pay for it.

Q. Do you have any idea what the cost of a pivot was in '05 and '06 in Kansas?

A. No, I don't.

Q. Okay. Is water leased within the District?

A. Not that I know of.

Q. Is water leased within your field office?

A. Probably to a degree. It's not something

that we would typically be involved in. If there's a private arrangement between two parties and the land's authorized, we wouldn't hear about it.

Q. You wouldn't hear about it. Have you heard about any such circumstances?

A. No. Well, let me supplement that a bit. There are some arrangements during the undesirable stream flow that we have some cities, Morganville, for instance, will acquire the right and make a temporary change to use that water from irrigation to municipal use when they're being regulated.

Q. Is there compensation exchanged for that?

A. Assume there is.

Q. But you don't know amount?

A. No.

Q. Forgive my geography incompetence. Is that above Concordia?

A. No. That's below Concordia.

Q. Thank you. In your experience, do irrigators within KBID typically irrigate with stored water during high precipitation periods, stored water being Harlan County or Lovewell?

A. During high precipitation periods? Well, to the extent that the water is in the system, if it's

been released from Harlan County they are going to try and make the best use of it they can, but they don't seem to have any difficulty terminating those leases when they have a precipitation ban.

Q. So the amount of precipitation in a given month would potentially affect the amount of water brought down from Harlan or Lovewell?

A. Certainly could.

Q. Are you aware of any operational restrictions at Lovewell?

A. Operational restrictions?

Q. Such as the amount of volume that can be held in storage at any one time.

A. Yes.

Q. Can you describe those, please?

A. Well, of course, anytime -- the Irrigation District only holds the authority to store up to the top of the conservation pool on any normal year. They typically ask the Bureau of Reclamation to ask the Corps of Engineers for a waiver for that so they can store additional supplies, and they did that during this period. Typically that is a number that the Corps has. Five percent is typically what they allow.

Q. Five percent above flood control

storage?

A. Yeah. Five percent above conservation level typically prior to May, and then they have to start bypassing the leases. Now, they have historically gone up as high as 10 percent. I can't say they did that during these years.

Q. During '05 or '06?

A. Right. I can't tell you specifically, but I know they have gone to 10 percent in some years.

Q. What would be the practical ramification for irrigators below Lovewell if the Corps was holding the elevation at Lovewell at that limit?

A. At which limit?

Q. The 10 percent above flood control storage.

A. They'll typically get, obviously, the use of that water, and so to the extent that it's available, then, they have an opportunity to apply more inches of water.

Q. But if those individuals were -- strike that.

Those individuals could not call for more water out of Harlan, I assume? There would be nowhere to put it.

A. Yeah. Exactly.

Q. Are you familiar with efforts by KBID to defer some costs owing to the Bureau of Reclamation during 2004, 2005 or 2006?

A. To defer payments to the contract?

Q. Yes.

A. That's something that's typically done by irrigation districts when they don't receive water.

Q. Was that deferral granted at any point during '05 or '06?

A. I don't know.

Q. If it were granted, how would that affect the operation costs for those years?

A. To the extent they don't get any, I think they essentially add that annual cost on their total repayment contract.

Q. And that would be repaid at the back end of the contract term?

A. Right.

Q. Not necessarily the next year?

A. No.

Q. What's the optimal allocation within KBID in terms of on a per acre basis? How many inches?

A. A full supply for KBID is probably 15 inches. They typically have -- some of their

system improvements have probably allowed them to kind of optimize their use between 1 and 15.

Q. And how often do they receive that amount of water, historically?

A. Just as often as there's that much storage available in Harlan County.

Q. Do you have any idea how many years that has occurred in the last, say, 50?

A. No.

Q. Were you present when Mr. Pope explained that in some years individual districts might take advantages of reclamation drought assistance programs?

A. Yes.

Q. Do you know if those programs were utilized by the District in '05 or '06?

A. I believe they were in '05.

Q. They were in '05?

A. I think so.

Q. What does that mean? How does that operate?

A. I'm certainly not an expert, but it's my understanding that they -- this was drought assistance money that was made available to them for not taking water. It essentially is a Department of

Interior program to leave more water in reservoirs for recreation, wildlife habitat, those kinds of things.

Q. Do you have any idea how much money those individuals received under those programs?

A. I don't specifically.

Q. Do you have any idea what that program generically pays out?

A. No.

Q. Do you know why that program was not used in 2006?

A. No. It may have been when water is available, typically Kansas-Bostwick wants to use it.

Q. Are you aware of any water in Harlan County Lake in 2006 available to KBID that they did not use?

A. Not specifically, no.

Q. Do you have any idea how much water was available in 2005 that they elected not to use?

A. This is just from memory, but I seem to recall something on the order of about 2 inches.

Q. Any idea what 2 inches relates to in terms of storage in acre feet?

A. No.

Q. Do you have any idea what the allocation

was in '05 within KBID?

A. Well, they would have -- they would have talked to their patrons and their board of directors at that point. Probably had already decided not to take water and apply for this drought assistance.

Q. Okay. What time of year typically is that decision made?

A. Bureau of Reclamation produces a projection in January and then monthly until they make a final projection. Typically about mid-May.

Q. I want to turn your attention to Exhibit 15 again.

A. Which one is 15.

Q. It's that one with the Kansas seal on top, closest to me.

A. This one?

Q. Yes. So this letter is dated April 18, 2005. Correct?

A. Yes.

Q. So at least by that date, presumably the board had made a decision not to take water?

A. Yes. I think that's probably correct.

Q. So presumably sometime prior to that the irrigators within KBID had knowledge of the likely water supply sufficient to make that decision?

A. Certainly.

Q. In your experience, about how far in advance in KBID are such decisions made? How much fertilizer to buy, how much they're going to plant, what the crop mix might be?

A. All of that is going to be subject to some of that initial January projection. You know, if that January projection by the Bureau is typically very conservative and --

Q. Meaning probably erring on the side of less water available?

A. Oh, absolutely, yes. And so if their projection is for a full water supply, then they're going to purchase seed and apply their fertilizer accordingly. If it's a lower water supply like this might have been, those decisions would be postponed, but those decisions would have had to have certainly been made by this point.

Q. So basically by January of each year the Corps has provided some projection indicating the potential available supply?

A. The Bureau does that, yes, under the contract.

Q. I'm sorry, the Bureau. Excuse me. And then there's a second projection provided by the

Bureau when?

A. There's monthly projection.

Q. Monthly projection.

A. Until they make the final one in May.

MR. WILMOTH: Why don't we take five minutes. Let's take ten minutes.

(Brief recess taken.)

Q. (By Mr. Wilmoth) Mr. Ross, one of the things we're trying to do as we go through this process is figure out where certain data reside. Do you have information, documented information, for example, about the location of the irrigated acres that are certified that also receive groundwater?

A. Okay. Let's make sure we're talking about the same thing. If we're talking about lands that are certified by the Bureau of Reclamation to receive project water, the answer to that is no.

Q. So you don't have documentation that shows where groundwater use occurs on those lands?

A. Okay. Now, the Bureau of Reclamation, we saw some changes back four or five years ago. The Bureau of Reclamation was going -- it is in the process of producing a map. I do not have that map. Now, can I tell you where those groundwater acres are

specifically, yes.

Q. And where are they?

A. And where are they?

Q. Yes.

A. Well, I mean, they're scattered throughout the irrigation district's boundary.

Q. Do you have a map that shows that?

A. I have a series of maps that come with the water right files that will demonstrate where those lands are.

Q. Could we obtain that information?

A. Certainly.

Q. Is that information -- would that take a long time to compile or is that something you could provide?

A. We have compiled it.

Q. I mean, currently available?

A. Uh-huh. Yes.

Q. I guess we would like to request that information to the extent we can obtain it in a timely manner here.

A. Okay.

Q. How about -- I'm sorry.

A. Just what you're requesting is groundwater diversions. Right?

Q. I'm talking about groundwater use on acres which are certified to receive reclamation water.

A. I'm not sure I can sort them out, but I can give you the acres that are within the District boundary that are authorized to receive groundwater.

Q. Some of those may include acres that are certified by reclamation and some of those may not?

A. That's right.

Q. And do you have a way to -- let me ask this. Do you have a map that shows which acres are certified?

A. No.

Q. Okay.

A. Not a current one. Not at this point.

Q. Essentially your map, to the extent you have a map, shows the full exterior boundaries --

A. Yes.

Q. -- of KBID?

A. Yes.

Q. And you do not have an ability currently to identify which lands within that area are certified to receive surface water?

A. That's correct.

Q. Okay.

MR. DRAPER: Is that the series of maps you're asking for?

MR. WILMOTH: I'm asking for the series that Mr. Ross identified which identify where groundwater is used within the exterior boundaries of KBID.

MR. DRAPER: Okay.

Q. (By Mr. Wilmoth) Do you also have documentation or maps that demonstrate the infrastructure within KBID? Specifically some of these drainage tile locations?

A. No. That's probably Bureau of Reclamation information.

Q. Okay. Do you have any idea the extent to which these tiles are located throughout KBID?

A. It's fairly extensive. And my knowledge of that part of the system comes from when I worked for the Bureau of Reclamation at the time when they were designing a lot of that drainage system.

Q. Okay.

A. It was not complete when I left the Bureau, so I can't give you any personal knowledge of what actually got constructed, but I know that the design was extensive.

Q. The design for the drainage tiles was extensive?

A. Yes.

Q. In conducting the design work for the drainage tiles, do you recall any studies that identified the volume of water those tiles might carry?

A. Not specifically.

Q. If we were interested in trying to determine where some of these groundwater wells were located within the District boundaries, would we be able to identify that information from the WRIS system?

A. Certainly.

Q. But that system would not alert us to whether or not those lands were within the area certified to receive reclamation water?

A. That's correct.

Q. With respect to some of this information and some of the data that we're talking about, and more generally with regard to your knowledge of the system, to what extent did you convey your knowledge to Mr. Book to assist with his report?

A. Well, I'm not sure I understood exactly the question.

Q. How much information did you provide Mr. Book to assist in his report?

A. Probably from just a review of the sort of fundamentals of what his report was going to include and then my observations of that. I didn't do any of the specific calculations or anything like that.

Q. Did you explain to Mr. Book, for example, that these drain tiles existed within the system?

A. Oh, yeah.

Q. Did you explain to Mr. Book, for example, that there were five or six hundred alluvial wells below KBID?

A. Uh-huh, yes.

Q. Did you discuss the impact of those wells on return flows?

A. Probably.

Q. Did you provide Mr. Book with any materials, documents?

A. Not that I can recall. I may have -- I may have pointed him to some documents where annual operating reports from the Bureau of Reclamation, things like that.

Q. How about Mr. Kastens or Mr. Leatherman, did you provide any materials or documentation to

them?

A. No.

Q. Did you have any input into the report that they produced?

A. They asked a few of the similar kinds of questions, but relied, I think, primarily on Mr. Book's report.

Q. The Book report?

A. The Book report.

Q. In terms of providing information or data, do you have a relationship with the KBID board? In that capacity do you provide them information or guidance in any regard?

A. No. Not typically.

Q. Do you ever attend the KBID board meetings?

A. I have occasionally, yes.

Q. On what occasion, for example, would you attend?

A. When they were doing contract negotiations with the Bureau back in the late 1990s, we attended fairly regularly to provide them input on other water rights situations and how changes to their contract might impact those water rights. I have attended their annual meetings on occasion. Typically just to

be in attendance, not really to provide a presentation.

Q. Do you provide any input on their allocations in a given year, for example?

A. No.

Q. Do you provide any input on, for example, requesting relief under the reclamation act?

A. Not typically.

Q. Okay. Transitioning to a new issue. Have you had occasion to review a report prepared by The Flatwater Group relating to Mr. Book's report?

A. I looked through it. Can't say I studied it.

Q. Did you formulate any opinions about that report?

A. I think there was some misconceptions, some mischaracterizations in there about the KBID District operations.

Q. Could you identify those?

A. Specifically this issue of commingled acres impacts the downstream users were something that probably didn't exactly fit operationally with the way things are done.

Q. Meaning that there was a greater or lesser impact to downstream users?

A. Well, their characterization of how those return flows were used and to the extent and timing of those return flows, I think without a specific knowledge of the operation systems, the tile drains, the quick response essentially that happens with those return flows, probably without that knowledge some of those uses were mischaracterized. Those are primarily the issues I noted.

Q. Mostly issues within KBID?

A. Well, within and then below KBID and just the reuse of water.

Q. The reuse of water below KBID?

A. Yes.

Q. And is it your estimation that The Flatwater Group underestimated that use or overestimated that reuse?

A. Probably underestimated it.

Q. How so?

A. Well, by assuming that it wasn't, in a timing situation, that it wasn't able to be reused within that year, you would underestimate the amount that was actually able to be used.

Q. So if I'm understanding what you're

saying, the return flows that come from the KBID lands are essentially available in the same year as the diversions?

A. For the most part, yes.

Q. The Flatwater Group identifies some potential limitations with respect to Lovewell Reservoir. Are you familiar with those?

A. Not specifically.

MR. WILMOTH: Okay. Pete?

MR. AMPE: No.

MR. WILMOTH: John, do you have any redirect? We have completed our direct inquiry.

MR. DRAPER: I would like to clarify one point.

CROSS-EXAMINATION

BY MR. DRAPER:

Q. Mr. Ross, you referred to surface water pumps on tributaries within the KBID District area that pick up KBID return flows?

A. Yes.

Q. Does that pumping provide additional water to Bureau certified lands within KBID?

A. Typically not. Those tributaries are -- in an elevation sense are below. They are waste ways from the District, so they're below the system, and

so those waters are typically picked up out of those tributaries and applied to lands adjacent to the tributaries that aren't necessarily, in fact, probably infrequently certified lands.

MR. DRAPER: Thank you. That's it.

MR. WILMOTH: I just have one follow on.

REDIRECT EXAMINATION

BY MR. WILMOTH:

Q. Mr. Ross, I'm confused by your final answer there, because if I understood you correctly before, you had no ability to determine which lands were certified and which were not certified within the exterior boundaries of KBID. How did you conclude that it's unlikely that these are being applied to certified lands?

A. Most of these water rights or quite a number of them will be outside those District boundaries. They will be -- the District's boundaries don't include those lands.

Q. How do you make that determination?

A. Well, we know what the outside boundary of the District is, the bigger outside boundary, and so when the tributary actually leaves that boundary and water is picked up, typically that water is going to

be applied to some land outside the District boundary.

Q. Did I just hear you say that those lands are below KBID generally?

A. Yes.

Q. So is it accurate to say, then, that the return flows that are impacted would be return flows outside of KBID?

A. Yes.

MR. WILMOTH: Thank you. That's all.

MR. DRAPER: Nothing further.

(Witness excused.)

SCOTT ROSS

STATE OF _____)

) SS:

COUNTY OF _____)

Subscribed and sworn to before me this _____
day of _____, 2009.

NOTARY PUBLIC

My Commission Expires: _____.

In re: Non-Binding Arbitration

C E R T I F I C A T E

I, JANE A. BLACKERBY, a Certified Court Reporter within and for the State of Missouri, hereby certify that the within-named witness was first duly sworn to testify the truth, and that the deposition by said witness was given in response to the questions propounded, as herein set forth, was first taken in machine shorthand by me and afterwards reduced to writing under my direction and supervision, and is a true and correct record of the testimony given by the witness.

I further certify that I am not a relative or employee or attorney or counsel of any of the parties, or relative or employee of such attorneys or counsel, or financially interested in the action.

WITNESS my hand and official seal at Kansas City, Jackson County, Missouri, this 28th day of February, 2009.

JANE A. BLACKERBY, RPR, CCR No. 877

Certified Court Reporter